## DEEPWATER HORIZON RESPONSE: SUBJECT-MATTER EXPERT PRESS CONFERENCE CALL

MODERATOR: MONICA ALLEN, PUBLIC AFFAIRS SPECIALIST, NOAA

> SPEAKERS: JANE LUBCHENCO, ADMINISTRATOR, NOAA

STEVEN MURAWSKY, DIRECTOR, SCIENTIFIC PROGRAMS, NOAA

DAVE WESTERHOLM, DIRECTOR, OFFICE OF RESPONSE AND RESTORATION, NOAA

DR. TERI ROWLES,
DIRECTOR, MARINE MAMMAL HEALTH AND STRANDING
PROGRAM (MMHSRP), NOAA

BARBARA SCHROEDER, NATIONAL SEA TURTLE COORDINATOR, NOAA

ROWAN GOULD, ACTING DIRECTOR, U.S. FISH AND WILDLIFE SERVICE

ROGER HELM, CHIEF, DIVISION OF ENVIRONMENTAL QUALITY, U.S. FISH AND WILDLIFE SERVICE

GLEN PLUM, CHIEF, NATURAL RESOURCES, YELLOWSTONE NATIONAL PARK

> J. MEL POOLE, UNIFIED AREA COMMAND CTR. LIASON, U.S. NATIONAL PARK SERVICE

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OPERATOR: Welcome, and thank you very much for standing by. At this time, all participants are on a listen-only mode. To ask a question during the question-and-answer session, please press \* then 1 on your touchtone phone. Please limit yourself to one question at that time. Today's conference is being recorded. If you have any objections, you may disconnect. Now, I'd like to turn the meeting over to Ms. Monica Allen, NOAA fisheries service. Ma'am, you may begin.

MONICA ALLEN: Thanks very much. Welcome, everybody. Thank you for calling in today for the national telephone press conference on wildlife impacts from the oil spill in the Gulf here, and how wildlife may be affected and the broader ecosystem. Today, we will start the press conference with opening remarks. And I'll read you the names of the speakers who will be doing the opening remarks. We also have with us today a number of subject-area experts who will be assisting with questions.

We're going to take your questions after the opening remarks, we're going to have closing remarks and we hope to get in as many questions as possible. We ask that each reporter identify themselves when they ask a question and the name of their media outlet. Thank you. Today, we have Dr. Steve Murawsky, who is with NOAA Fisheries Service. He is the director of scientific programs and the chief science advisor. We have Dr. Glen Plum, who is the chief of natural resources at Yellowstone National Park.

We have Dr. Rowan Gould, who is the acting director of the U.S. Fish and Wildlife Service. As our subject-area experts, we have a number. I'm going to read their names carefully. One of the media advisories that you received has some of the titles inaccurate so I urge you to go to the Deep Horizon website – that's www.deepwaterhorizonresponse.com – or listen very carefully to me as I identify all of their titles.

We will have Dr. Roger Helm from the U.S. Fish and Wildlife Service. He is the chief of the division of environmental quality. We will have Dr. Ralph Morgenweck of the U.S. Fish and Wildlife Service. Dr. Morganweck is the senior science advisor and liaison officer at the United Area Command.

We will have J. Mel Poole, who is the Catoctin Mountain Park superintendent and National Park Service liaison officer at the Unified Area Command Center. We will have, from the Fisheries Service, Dr. Teri Rowles, who is the director of Marine Mammal Health and Stranding Response Program and we will have Barbara Schroeder from the Fisheries Service, who is the national sea turtle coordinator. Now we'd like to begin with Dr. Steve Murawsky of NOAA Fisheries Service.

STEVEN MURAWSKY: Thank you, Monica, and thank you all for joining this call. We are all quite vitally interested in the fate of wildlife populations relative to the oil incident. NOAA and its interagency academic partners continue to be concerned about the potential impacts of both oil and the dispersants on the short- and long-term prospects for marine wildlife populations, including but not limited to the fishery populations, marine mammals, sea turtles and other critical components of the Gulf of Mexico's large marine ecosystem.

NOAA and its state agency partners have a robust monitoring program at sea, in the air and on the shorelines to determine the species at risk from oil and dispersants and to track the movements of the oil and the dispersants relative to the animal communities that we're interested in.

The observations for animal impacts include shipboard surveys aboard our own NOAA research vessels, state research vessels, chartered commercial fishing boats as well as aerial surveys of mammals and turtles on both fixed-wing aircraft and chartered helicopters. In particular, we're concerned about the fate of marine mammals and turtles – the air breathers that must periodically surface where they can inhale these products.

The Gulf of Mexico is home to many marine mammal populations including bottlenose dolphins, which occur very inshore as well as offshore, as well as sperm whales, Bryde's whales, beaked whales and other deep-diving whales, as well as offshore dolphin populations. These populations are in the vicinity of the incident and they use the deep ocean canyons that are next to it to feed.

There are five species of endangered and threatened sea turtles that inhabit the Gulf of Mexico and live in shallow coastal areas, as well as transiting the deep areas. Aerial surveys have observed both marine mammals and sea turtles swimming in and near oiled waters. Marine mammals and sea turtles, as well as the species upon which they depend, have been affected by this event ever since it began and are continuing to be exposed to dispersants and oil.

These impacts, in particular in the offshore areas – I know my colleagues at the Department of Interior want to emphasize this – are difficult to detect offshore because it's an area that's very difficult to observe. A functioning Gulf of Mexico ecosystem is critically important to all these Gulf seafood species that we eat and the long-term impacts are likely to express themselves over years to come.

The springtime is the spawning time – the critical point in the lifecycle for many of the Gulf's most important fishery resources, including offshore, the bluefin and yellowfin tuna. Inshore, the larvae of groupers as well as white and pink shrimp, cobia, amberjack, Spanish and king mackerels, dolphin fish, as well as blue crabs. We know from testing that the youngest life stages in these species are the most vulnerable and that's the free-floating eggs and the larvae.

This time of the year is also the beginning of nesting season for sea turtles in the Eastern Gulf of Mexico. First nests have already been laid by loggerheads in the Florida panhandle and we expect nesting in Alabama is imminent. Of course, we're working very closely with the Fish and Wildlife Service and others to monitor nesting and to try to do anything that we can to mitigate or minimize the impacts on nesting activity.

Since April 30<sup>th</sup>, we've documented 162 sea turtle strandings from the Texas-Louisiana border through the Florida panhandle. The stranding rate that we have – and this is the first two weeks of May compared to May five-year average between 2005 and 2009 – is up significantly from that rate. Most of the sea turtles that we've documented actually have been sea turtle mortalities.

Especially in Mississippi, Louisiana and Alabama, the stranding rate is significantly higher than the background level that we've detected in the past. I would say we need to caution those numbers a little bit because of the increased effort that we've got looking for turtles now as compared to sort of background monitoring.

One of the important aspects of this is that we've got, of the animals that were in good enough condition, we're doing necropsies, which are basically autopsies, of looking for either oil on the surface of the animal or ingested and then there are samples of potential contaminants, going for more detailed chemical analysis. My colleagues, Dr. Teri Rowles, who's a veterinarian, and Barbara Schroeder, are prepared to answer questions on that.

Overall, over and above the wildlife monitoring activities, we're also working with our colleagues at the Food and Drug Administration and EPA and the state partners to monitor the seafood supply to ensure that the market only contains wholesome and safe products. All of our agencies are deeply concerned about the effects of the spill on deepwater biological communities as well which may be particularly vulnerable.

These things include deepwater fishes, deep corals, so-called biogenic communities. Also, one community that hasn't gotten a lot of interest is the drifting pelagic community and Sargassum algae. This drifting community contains many – the larvae of many species as well as juvenile pelagic-state sea turtles. So we're continuing to monitor. We will continue to monitor the effects on marine wildlife and are preparing additional at-sea sampling to stay on top of the situation.

Finally, from NOAA's point of view, and I know that I speak for other agencies as well, this is an all-hand-on-deck exercise. We're particularly appreciative of the cooperation of our partners at the Department of Interior and other state and federal agencies and universities and private institutions. We've rotated many of NOAA's assets into this region, including some of its most experienced people so that we can try to stay on top of this rapidly changing situation. Thank you.

MS. ALLEN: Dr. Murawsky. And now we will hear from Dr. Glen Plum, who is the chief of natural resources for Yellowstone National Park.

GLEN PLUM: Good afternoon, everyone. This is Glen Plum, normally duty stationed up at Yellowstone National Park and brought down to the Mobile Unified Command Center to assist the National Park Service in executing our responsibilities in the interagency team to address this incident. The mission of the National Park Service, just to reiterate, is to preserve unimpaired a wide variety of natural and cultural resources of value in the national park system for the enjoyment, the education, the inspiration of the American people.

We accomplish this mission through cooperation with a wide array of partners. Specific to this incident, there are a number of NPS units located within the potential range, from Padre Island National Seashore along the Texas coast all the way down potentially to Biscayne National Park on the south coast of Florida.

A wide range of park units within that arc include the Jean Lafitte National Historic Park and Preserve; Gulf Islands National Seashore; the De Soto National Memorial; Big Cypruss National Preserve; the Dry Tortugas National Park and Everglades National Park. Across these NPS units, there are thousands of species of wildlife that make their home there and a wide variety of habitats including ocean but also the ocean-land interface: the marsh, the mangroves, the swamps, the beaches as well as upland terrestrial – upland landscapes.

We are concerned and working on this issue with our partners because we anticipate long-term effects. Now, the short-term effects to wildlife within the National Park Service responsibility could be the direct impact of oil contamination or other volatile or toxic chemicals that could result in debilitating or death of wildlife. But we are also concerned about the long-term potential for movements of some of these contaminants in upland habitats or to mangrove habitats with storm surges that could embed these in these very sensitive landscapes.

We're also concerned about the long-term effects of contamination and degradation of wildlife habitat across the wide range of the wildlife ecosystems, all the wildlife predator-prey relations as well as the individual species because if those degrade, then we could begin to see declines in sensitive top predators as well.

We're also concerned about the loss of habitat due to human disturbance during the response activities. So we don't want the cure to be worse than the disease, as such. So we are working very closely with our partners to prevent and minimize damage to wildlife resources throughout the Gulf.

I'd like to reiterate that the Park Service has extensive long-term information about wildlife habitats and wildlife in the NPS units. That baseline data is being provided to all of our partners. We are conducting rapid pre-oil assessments of critical and key resources in our NPS units with our partners.

Then we are developing the foundation for long-term post-assessment so that we can understand the consequences of this event for these resources and do our mission of sharing that with the American public who come to visit the parks – the local and national and the international publics – and help them understand this milestone event in the history of these NPS units across the Gulf. That concludes my opening remarks.

MS. ALLEN: Thank you, Dr. Plum. Now we will hear from Dr. Rowan Gould, who is the acting director of the U.S. Fish and Wildlife Service.

ROWAN GOULD: Thank you, Monica and good morning to everyone – or afternoon, I guess, depending where you are. Thanks for joining us today. As you know, the current response efforts are focused on stopping the ongoing leak and preventing more oil from spilling into the Gulf of Mexico. But even as those efforts continue, multiple federal and state agencies are working to protect fish and wildlife in the Gulf and the vital habitats that support them. At the same time, we're documenting impacts and working to understand the long-term effects of this spill.

I also want to thank Dr. Ralph Morgenweck, service's senior science advisor, and Roger Helm – Dr. Roger Helm – who is our chief of our service's division of environmental quality. They're on the call today as Monica indicated and they'll be able to answer some specific questions later on in the call.

I want to make no mistake about it: This spill is significant and in all likelihood, it will affect fish and wildlife resources in the Gulf and maybe across the North American continent for years, if not decades. The first impacts to wildlife are now becoming apparent. So far, we've recovered a relatively small number of visibly oiled birds from this spill and we're awaiting some tests to confirm the origins of the spill in many other cases.

It's important to note that the visibly oiled birds are only a small, small part of our concern. What concerns us most is what we can't see: the birds and the marine mammals that spend most of their lives offshore and the probably chronic and long-term effects of the spill on the marine coastal environment.

Millions, millions of birds that range across the Western Hemisphere winter in or migrate through these estuaries down here, these marshes and other coastal areas that surround the spill, and dozens of other species of birds and marine mammals spend most of their lives at sea. So they're foraging the same waters that are inundated with oil today, right now.

We've caught a break right now because millions of migratory birds that winter in the Gulf Coast are currently further north on their breeding grounds in Canada, in the northern prairies of the United States. But of immediate concern to us, there are dozens of other species of local birds such as brown pelicans and least terns that are breeding along the Gulf Coast. That's on several barrier islands, whether they're state wildlife refuges or national wildlife refuges or national parks.

Those are very important, sensitive areas and we expect that they will bear the brunt of the immediate impacts of the oil. I don't know if we'll ever know the extent of the spill's impact on many species of birds and marine mammal, given how far off shore they spend their lives and the vast variance in the Gulf in which they are found. But we're responding to this unprecedented threat as quickly and comprehensively as possible.

In terms of the Fish and Wildlife Service, we've got three national wildlife refuges that we believe are currently at risk with the spill and actually have seen oil wash ashore. That's at Breton National Wildlife Refuge and Bon Secour and Delta National Wildlife Refuges. We're focusing on protecting the most sensitive parts of these refuges from the oil. They're kind of at the leading edge of the blob as it's moving inshore, moving back and forth out there on the Gulf.

The spill response folks that we're working with have deployed a huge amount – over 1.3 million feet – of containment boom and they're protecting the most sensitive areas of marsh and other vital habitats. Overall, I'd say the Department of Interior has deployed a large number of people.

We've got over 600 employees deployed to the Gulf in response to this incident and that includes, last time I checked, 200 or more Fish and Wildlife Service employees and over 100 National Park Service employees. They are at staging areas throughout the Gulf of Mexico, working with BP and other federal agencies and the state partners to respond to the oil spill as it relates to the impact on the wildlife.

I want to give a very specific recognition to our close working relationship with the state wildlife agencies along the Gulf Coast. It's their efforts – and it's along with their efforts and our efforts that are a critical part of the response to this disaster.

In particular, I'd like to thank Corky Pugh, who's the director of Alabama's Division of Wildlife and Freshwater Fisheries; Nick Wiley, who's the executive director of the Florida Fish and Wildlife Conservation Commission; Bob Barham, secretary of the Louisiana Department of Fisheries and Wildlife; Sam Polles, who's the executive director of the Mississippi Department of Wildlife, Fisheries and Parks; Carter Smith, the executive director of the Texas Parks and Wildlife Department as well as the commissioners in each of those states for their commitment to work together with us and their strong leadership in supporting this response effort. Their participation with the federal entities is absolutely necessary.

We continue to conduct multiple over flights to survey the birds, manatees and other wildlife along the coast. This includes a lot of the effort that will help determine the impacts as they occur, quantify the impacts and then predict the effects in the future. We're also conducting beach surveys to monitor sea turtle nests as was indicated, but we're providing protocols for clean-up crews should oiled nests be discovered.

And we're working with the United Area Command in Robert and the three United Incident Command structures in Houma and Mobile and St. Petersburg to ensure that we have consistent information on wildlife and habitat impacts from all of the incident command sites in the Gulf. By the way, those impacts are posted daily – it was just put in front of me – at deepwaterhorizonresponse.com website. So that's a good place to go. Finally, we're conducting national resource damage assessments that will help us restore these vital ecosystems of the Gulf once this spill has been contained. So thank you for your attention. We're looking forward to your questions.

MS. ALLEN: Thank you very much, Dr. Gould. Now, we open this up to reporters' questions. Again, we ask the reports who have questions to please identify themselves and their media organization. As Dr. Gould mentioned, we should have up on the website at the Deep Horizon website – Deepwater Horizon website – the updated information which will be regularly updated on wildlife impact.

OPERATOR: Thank you. Our first request is from Tammy Lytle, AOL News. Your line is open.

Q: Hi, yes, it's Tammy Lytle from AOL News. Can you give us sort of a general idea of how bad this is? Is there any other disaster that you can compare this to? Any idea in the end

what we're going to look at in terms of total number of animals that are lost and the cost for all of this in terms of what you're doing to try to protect them?

RALPH MORGENWECK: Yes, this is Ralph Morgenweck. I can't do a side-by-side comparison but I can give you some things to think about and I'm going to ask Roger Helm to comment on it as well. First of all, many times we have talked about the comparison with this spill with other spills but each spill has its own unique characteristics. Each spill has its own unique weather conditions, biological conditions and this one is no different.

Unlike the Exxon Valdez, where the spill was very near to shore, the oil was rapidly on shore, in a northern environment, this one is spread over a much larger area and in a different environment. As a result of that, some kinds of the comparisons are hard to make. I don't think that we have any estimates in terms of how many animals we will actually capture that have been oiled.

At this point, we have relatively few birds. But as you will hear more about this, the visibly oiled wildlife is only the tip of the iceberg in terms of impact. So I think that while that's an easy metric to use, it may not be a representative metric of the overall impact. I'd like to ask Dr. Helm to make a comment on comparisons between spills.

ROGER HELM: Good afternoon. This is Dr. Roger Helm. As Ralph said, it's very difficult to compare across spills. We can have a spill of a few thousand gallons killing thousands of birds and a spill of this magnitude – clearly multiple millions of gallons – killing very few birds or at least we have very few birds come onshore. It's a function of what the wildlife is in the area.

In this situation, it's going to be very difficult, at this point in time, to make any kind of estimates because we just don't know what's going to happen onshore in terms of how much oil's coming onshore, where the majority of birds in this area are located. There are not as many offshore marine birds, as a comparison to Alaska, where the Valdez spill occurred and killed so many birds up there.

But if this stuff comes onshore, a lot of birds are going to die. But what we can, I think, definitely say is that there's great, great concern over the sub-surface nature of this event and the amount of dispersants used and what this means to this entire ecosystem. The concern is there. Exactly getting a handle on that is going to be a new task for the trustee agencies, the states and the feds to try to figure this out. This is going to be a groundbreaking science to really get a good handle on the total impact. But we all feel very, very strongly that the impact is very significant.

OPERATOR: Our next is from Elizabeth Shogren with National Public Radio. Your line is open.

Q: I'm wondering if anybody can comment on the state proposal that they want to build this huge berm or sandbar across tens of miles of the barrier ocean. Is that a good idea? Are your agencies calling for that as a way to protect wildlife and the fragile coast?

MR. GOULD: Well, let me say that –

Q: I'm sorry, who is this?

MR. GOULD: This is Dr. Rowan Gould, Fish and Wildlife Service. Let me just say that the Department of Interior is actively involved in working on that permit application to the Corps of Engineers by permitees that would like to build a barrier in front of the offshore islands, one of them being the Chandeliers in Breton National Wildlife Refuge and the other along another barrier island location west of the Mississippi Delta.

This is clearly a response to stop oil. Secretary Salazar is very interested in this area in terms of restoration and bringing this ecosystem back into the health that it enjoyed many, many years ago. So what we're doing is working with the permitees and being involved in the process. Obviously, it's still out there. The project's being still developed and discussed and we're all involved in those discussions and I really have no timeline about when any decisions are going to be made.

But we're all actively involved and we all have the best interest of both the marshes that these barriers are supposed to protect and the ecosystem they're supposed to enhance at heart. All I can say is we're working on it. We'll all work together to do the right thing on this particular issue, whatever that may be.

MR. MURAWSKY: This is Steve Murawsky. Let me just follow up and say that that proposal is currently being reviewed by the federal on-scene coordinator in terms of its feasibility and its efficacy and that will have input from all the federal agencies.

OPERATOR: Our next is from John Flesher, Associated Press.

Q: Thank you. Could any of you offer any specific numbers about particular wildlife that have either been recovered alive covered with oil or have been killed by the oil, at this point?

MR. MURAWSKY: This is Steve Murawsky, again, from NOAA. I'll give you the turtle and dolphin numbers. Currently – as of this morning – there were 162 sea turtles; 156 of those are mortalities. On dolphins, we've got 12 bottlenose dolphins that are fatalities.

Q: And you're able to say that this is because of the oil?

MR. MURAWSKY: Negative on that. The results from the necropsies are not in yet. We cannot say anything definitive about the cause of death.

OPERATOR: Our next: Brian Winter, USA Today.

Q: I'd like to talk a little bit more about seafood, if possible. How is our appraisal of the risk to the food supply chain, given what we've learned over the last few days about the presence of oil and the dispersants within – deeper in the water column, beneath the surface?

MR. MURAWSKY: Sure. Everybody is very concerned. Sorry, this is Murawsky again. Everybody's concerned about the integrity of the seafood supply and its safety. I can tell you that the agencies, both federal agencies are involved as well as the state agencies are sampling very vigorously.

But before this spill made landfall, there were a number of efforts out to capture baselines. I can tell you that the area where the oil's been most concentrated was sampled very intensively after Katrina. So we actually have very good baselines, in particular in shrimp and Atlantic croaker and a few other species. So we know pre-spill, what the condition of the seafood was.

That being said, the overall risk of oil to humans in seafood is actually moderate to low. Fish generally clear these kinds of compounds rather quickly, as long as the oil contamination is not severe. So within a few days, if a moderately to lightly oiled fish were to encounter this and survive, that they would clear it through their normal system.

That being said, the monitoring program has three phases. Number one, as you all may know, there has been fairly extensive fishery closures and changing spills closures today to get ahead of the spill. Part of the sampling program is to look at areas that had been oiled but now are free to actually discern whether that's in the seafood supply now.

Two types of tests are done: the so-called sensory tests, which are basically smelling and eating, which are actually quite sensitive, and then chemical analyses. So currently, there's a number of assets out getting samples and those are going through the testing process. The second issue is a broader surveillance in the water of the potential impacts, because we've got a spill that's spreading out both to the west and now potentially to the southeast.

So there's a larger effort to capture samples, particularly shrimp and bottom-dwelling fish. Then the third is a market surveillance. This is issues that the broader Gulf seafood supply – both the FDA and NOAA are involved in looking at that supply to detect both the presence of oil and dispersants. Thank you.

MR. GOULD: By the way – this is Rowan Gould again – I have in front of me – I wanted to give some specific numbers based on a question or two ago regarding the bird situation and capture and retrieval. We've captured a total of 12 birds. Eight of them have been cleaned; four have been released. We've collected 23 oiled birds that were brought in dead into the center. So we've got a total of 33 birds oiled directly associated with the spill at this point.

We've had really bad weather out there for the last day or two. It's just yesterday and today when we've had some reasonably good weather to get out and be looking around and responding to the reports of oiled birds – the hotline that's available to folks. So we're out there right now looking around. I can't predict what we're going to have but the numbers that I'm

telling you right now have resulted from our efforts during periods of time when it was really hard to get out there.

OPERATOR: Thank you. Our next: from Mira Oberman with AFP.

Q: Hi there. Thanks for taking my question. I'm just hoping that you can give us some understanding in comparison to previous spills about the numbers of animals that can be recovered versus the numbers of animals that will end up being killed. I remember speaking to someone about the Exxon Valdez spill who told me that I think 1600 birds were recovered and an estimated half a million were killed. Can you speculate as to how this spill might impact the wildlife?

MR. HELM: This is Roger Helm from the Fish and Wildlife Service. Each spill, as we've emphasized, is different. And we're not trying to be cute there; it's just very difficult to say what is going to happen. And it's partly a function of our ability to recover birds – where they impact oil, where they die and our ability to recover them. And so birds that die far offshore, such as happened more in the Valdez spill, where you had a lot of what we call pelagic or offshore birds – i.e., they live, spend most of their time 30, 40, 50 miles off the coastline, or that's where they may be feeding.

But if they impact oil at that point and they die there, they're only going to last about two weeks or less on the water before they sink and are gone. Even if those birds make landfall, they can be scavenged. They can rewash – you know, wash along the shoreline and then sink. So there's a lot of reasons why it's very difficult for us to have a good estimate of what is going to happen. Here, we have, as we've said, a lot of shore birds, marsh birds, where we expect them to get impacted close to shore. In that context, it's more likely than not that we're going to recover some of these birds.

It's also more likely than not we're going to have a lot of birds oiled that do not die immediately. And so we see a lot of oiled birds, and that is going to be something we're going to be evaluating to try to get a better handle on the impact of this event on birds, because most of them, oftentimes, just die from hypothermia.

So it's going to be a very difficult thing – it is impossible and it would be not – it would be wrong for us – I'm not articulate here – it would be incorrect for us to try to give you that kind of estimate. We can say we're going to look at it very carefully. At the end of the day, we will, I think, have a very strong estimate of mortality here and impacts of this event, but it's going to be a ways down the road before we get there.

OPERATOR: I'm wondering whether our subject-area experts on marine mammals and turtles would like to speak about this as well – Barb – Barbara Schroeder and Teri Rowles.

DR. TERI ROWLES: Yes – (inaudible) – for Teri Rolles, and we have somewhat similar and somewhat different aspects that we look at for marine mammals and sea turtles. Our species that we're evaluating for cetaceans and sea turtles are being exposed and have been exposed to the oil offshore since day one.

They typically don't come on land, except for sea turtles on nesting beaches. In addition, we are evaluating, with full necropsies, all the animals that we have found as carcasses on shore or near shore and on the beaches, because we know that external oiling is likely not to occur, even though there may be impacts, or they may have ingested or inhaled oil and oil chemicals and dispersant chemicals. So our investigation will be looking at necropsy results and tissue analyses, rather than a metric of external oiling, just through the way that the animals are expected and what we expect to see.

In addition, offshore carcasses, similar to what Roger said about birds, rarely get onshore. And so if and when there's an impact along the shore for coastal bottlenose dolphins or for manatees, carcass detection and sick and injured animal detection will be much easier. Those species that are living in the deep water, like sperm whales or the pelagic turtles, may not be detected by beach-based or coastal based mortality and morbidity surveys. And I'll let Barbara address the turtle issues.

BARBARA SCHROEDER: Yeah, this is Barbara Schroeder. I just would reiterate what Teri said. We do have strong concern about turtles. They live both in the near-shore waters and on out through the shelf and out into pelagic waters, where they spend a lot of time at the surface in areas where sargassum seaweed and other surface-floating organisms congregate, because of surface currents or wind currents.

And these are the same kinds of places that oil and oil products will converge, as well. So we have very strong concerns about that, both immediately now and for some time to come. We do have a number of dead turtles onshore, but we also believe that most of the impact to turtles, at least at the moment, will not be readily seen because it's happening offshore and, as with the seabirds and marine mammals, most of those mortalities will never make their way to shore to be counted.

OPERATOR: Thank you. Our next: Sunny Lewis, Environment News Service. Your line is open.

Q: Thank you for taking my question. Can you tell us more about the dispersants? Exactly what chemicals are they, and how might these chemicals affect the birds and animals?

MR. MURAWSKY: This is Murawsky again. The chemical that's being used – the trade product is called Corexit – C-O-R-E-X-I-T. And it's been tested and approved by EPA for these kinds of things. Basically, it's combined of a surfactant and basically a chemical that basically, you know, acts as a detergent.

It has a relatively short half-life. It does have some toxic properties that have been tested primarily against small fishes and invertebrates. By itself, I would say it's moderate to low toxicity. It is not toxic to humans, although it can create some skin rashes and those kinds of things. In terms of its potential impact on birds directly, I don't believe there's been any testing on that, at least nothing that I know of.

OPERATOR: Thank you. Our next: David Biello, Scientific American Magazine.

- Q: Hi, thanks for taking my call. My question is, what, if anything, do we know about the deepwater impacts? I'm not just talking marine mammals and sea turtles; I'm talking about the deepwater corals and all those ecosystems that we can't see and we can't monitor readily? What, if anything, do we know about impacts there, to date?
- MR. MURAWSKY: On the sorry, this is Murawsky again on the subsurface, we have some capability that's been deployed and some new cruises that we're scheduling. As you said, I mean, this is, by its very nature, difficult to observe. I would say that this is the spawning season for bluefin tuna. In fact, they spawn in the offshore areas surrounding the spill. And there is a current cruise out there looking at eggs and larvae through samples at the surface, as well as a small mesh net that's towed, you know, obliquely through the water.

In terms of deepwater coral communities, we have not done any observations that I know of since the spill began. There is a number of studies that have been done sponsored by MMS and others, and one thing we know is that there are some deep corals called ophelia that are in the area, and then also a number of communities that are so-called biogenic communities.

And some of these actually live on hydrocarbon seeps. And so this ecosystem is not totally devoid of at least some hydrocarbons in the water. Those issues are going to play out over time as we actually document where the oil has been and at what concentrations.

MR. HELM: This is Roger Helm speaking again, and it's important both that – we don't have a lot of information, as Steve, I think, articulated well, on the deep corals and the deep water. But realize that it was only a small amount of – you know, maybe 20,000 gallons, as far as we know, at this point in time, that was used, deepwater, and you know, the order of half-amillion gallons of dispersants have been used at the surface. So in the photo zone, the upper couple hundred feet, is where the majority of impact is going to happen.

And how that plays down – how the sinking of those oil droplets occurs, or whether they rise – there's a whole host of things below the surface that the trustees and the agencies are going to have to get their brain around, that it's going to be very new here. And we certainly expect significant impacts, whether they're oxygen depletion impacts or direct toxicity impacts. But it's going to be a complicated question that we're going to spend a lot of time trying to understand.

OPERATOR: Thank you, our next: Janet McConnaughey, the Associated Press.

- Q: Going back to the sea turtles, can you give what the stranding rate along the Alabama-Mississippi-Florida coast usually is for this time, and also whether sea turtles (sic) have been found in the turtles' lungs in any of the necropsies.
- MR. MURAWSKY: So this is Murawsky again. In terms of the background stranding rates, for the last five years, the background stranding rate for the month of May for Louisiana, Mississippi, Alabama and Florida panhandle combined, they average around 47 with a range of 15 to 80. And I'll defer on the question of any macroscopic views of the turtles.

I would like to say, however, that there is an interesting thing about these turtles. Almost all of them are juvenile Kemp's Ridley turtles, and so that population's interesting because this is one of the major feeding grounds – the Northern Gulf of Mexico – for the juveniles, and many of the adults are actually down off of Mexico right now breeding. So this is primarily an impact on the juveniles of Kemp's Ridley, to date anyway.

OPERATOR: Barbara Schroeder, would you like to add to what Dr. Murawsky said about the turtles?

MS. SCHROEDER: I'd just – to respond to the other question, if I heard it correctly, it was a question about whether oil has been observed on necropsies. For the animals that have been thoroughly necropsied, we have observed no visible oil either externally or internal. We have taken tissue samples from carcasses that were in good enough condition to do so, and those tissues will be examined much more closely in the days and weeks to come. But in terms of visible oil, none has been observed on any of the carcasses recovered, and none has been observed visibly internally on those that have been necropsied to date.

OPERATOR: Thank you, our next: Merrill Wood (sp), National Wildlife Federation. Ms. Wood, your line is open. (Pause.) I'm going to clear it and move on. CNN Money with Steve Hargreaves, your line is open.

Q: Hi guys. After the Exxon spill, the company paid, I think, almost a billion dollars in damages for wildlife kills. Do you expect BP to receive some type of bill for this, as well? And if so, how would that be calculated?

MR. HELM: This is Roger Helm again. The responsible party, in this case BP, is responsible for paying – and this is under the Oil Pollution Act – is responsible for paying for the investigation to determine the magnitude of the injury and then responsible for paying for the restoration that is equivalent to that magnitude of injury. So it's scaled directly to the amount of injury that occurs across the resource categories to restoration actions that restore those resource categories.

Under the Oil Pollution Act, this is not a punitive law. The concept is not punitive. It's not like someone did a bad thing and you owe us a bunch of penalty money and we can spend it as we want, being the government. No, this is a situation where we have to go out and establish, here is the nature of the injury and here is the nature of the restoration actions that the trustees can take that will restore that direct injury. And the responsible party, in this case, BP, is responsible for paying those costs.

OPERATOR: Thank you. Our next: Jeff Ball, Wall Street Journal. Your line is open.

Q: Hi, thank you for doing this call. I wondered if those of you – if you could talk a little bit more about the effect on wildlife, both marine life and birds, that would pass through this oiled area but live elsewhere. A number of you alluded to that. Can you explain a bit more what sorts of animals you're talking about in what quantities, and what might be the long-term effect?

MR. MORGENWECK: Yes, this is Ralph Morgenweck. I'll talk about birds a little bit more. As Dr. Gould mentioned earlier, we are fortunate, in the sense that a lot of the birds that winter in the Gulf are now in the northern part of the United States and into Canada, where they're in their nesting grounds. So that buys us some time. However, this winter, when they return to their wintering grounds, they will be exposed, to one degree or another, to the results of this particular spill.

So some of the immediate concerns that we have are for beach-nesting birds that nest in single nests or are colonial nesters. So they would be species like Snowy Plover, Wilson's Plover, American Oyster-Catcher, Black Skimmer and a number of terns species – Common Terns, Sandwich Terns, Royal Terns, et cetera. So these would be some of the birds that would be nesting on the beach and if oil was to impact the beach area, they would be some of the first birds that would be impacted as they breed.

Obviously, if the oil was to get into the marshes, then we'd have a whole 'nother suite of birds that we would be concerned about that are marsh-nesting birds, such as rails – Clapper Rails, King Rails – those kinds of species. But we're hoping, of course, that our good fortune holds and that we don't have a heavy coating of oil on the beach and in the marshes. But that is yet to be seen. However, the indirect effects on these critters will be there. In other words, if it affects their food sources, obviously, that's one of these long-term effects that we're going to have to be attempting to measure as time goes by.

MS. SCHROEDER: This is Barbara Schroeder. I'll speak a little bit to that question about the use of this area as a migratory habitat for sea turtles. This is an area of concern for us, as well as for the turtles that are more resident within the spill area. But this part of the Gulf of Mexico is a migratory pathway area, as is most of the Gulf, really, for sea turtles – for Kemp's Ridley and Loggerhead and Leatherback turtles.

This timing of the spill is – coincides, really, with the movement of Loggerhead turtles from their resident foraging areas to their nesting beaches, if this is a year that they intend to nest. They don't nest every year. So this is an area that we know that they pass through. We have that evidence from satellite tracking work that's been done in previous years. So that's another concern. It's not just the resident animals.

The other concern about the spill area will come starting in about a two-month period when we have hatchlings emerging from nests that are starting to be laid on the Northern Gulf Coast, principally in Alabama and the Florida panhandle, and then many, many more nests that will be laid along the whole southwest peninsula, Florida Coast. Those hatchlings emerging from those nests make their way offshore into the deeper, pelagic waters to become associated with these sargassum – primarily sargassum algae convergence areas that we talked about earlier.

So we are working together with Fish and Wildlife Service to try to develop protocols and plans, depending on what the conditions are in the Gulf in these areas, when we start having hatchlings emerging from nests. We're now in the Northern Gulf. We are collecting very

detailed information on every nest that's laid so that, if necessary, we will be able to go back and relocate most, if not all, of those nests.

MS. ALLEN: This is Monica Allen from NOAA fisheries. We have time for two more questions and then we're going to go to the closing comments by our speakers.

OPERATOR: Thank you very much. Our next, then, from Rob Marciano with CNN. Your line is open.

Q: Hi, thanks for taking my call. I have two or three questions on the same topic for Dr. Gould or Dr. Helm. The number of birds brought in – 12 being rehabilitated and 23 oiled birds brought in that were dead – so 35 total oiled birds. You can correct me if I'm wrong on that. And also, what species of birds are considered to be offshore birds here in the Gulf of Mexico this time of year, and how far offshore do Brown Pelican and Least Terns go for feeding? Thank you?

MR. HELM: This is Roger Helm speaking. Offshore, you're going to have some gannets, petrels, some of the seagulls, you know, with this situation, about 50 miles, 60, 70 miles offshore. Most of the birds that you would consider a seabird, like a tern, a gull, a pelican, cormorants – they will traverse that distance but they don't spend most of their time out there, where other birds like Storm-petrels and some of the gannets and they're called tube-noses – it doesn't make a difference. So there's not a large percentage of populations of birds out there.

The pelicans and the terns typically will stay within, you know, three to five miles from the shoreline. Some of them really work very close to the shoreline, but occasionally going out further. And they'll traverse out there, from going from one location to a next. So it's really a function of the amount of time that they're out there that's our concern, and it's our belief, at this point in time, that you're going to have a lot of near-shore impacts, not a lot of offshore impacts, because we just don't have the density out there.

OPERATOR: Thank you. Our last question today: Eric Stokstad with Science Magazine. Your line is open.

Q: Hi, Dr. Murawsky, could you just expand real quickly on what additional at-sea sampling you're planning to do? Was that for seafood, or for deepwater impacts, as well? And just one quick thing to Dr. Helm – (inaudible) – for instance, not doing deepwater work, right? Were you just commenting on that earlier?

MR. HELM: This is Dr. Helm. Correct. I was just commenting on that. We are – NOAA is doing the deepwater work.

Q: Got it.

MR. MURAWSKY: So good afternoon, Eric. So let me just detail, on the seafood work, I talked about that a little bit and that's, you know, surveillance that we're doing with our own inshore vessels, with state vessels and with the – we've contracted with some commercial fishing

vessels. For the more broad-based ecological impacts, we're using the information that we've gotten from a number of academic partners – for example, the LUMCON vessel The Pelican was out and brought some samples back.

The USF vessel, The Weatherford, has been out on one mission, and is likely going back. And then currently, we've got the NOAA research vessel Gordon Gunter out there doing biological assessment work and we're going to turn that vessel around next week and go back and work in the plume areas. So we've got a fairly substantial number of vessels, plus there's a number of academic partners that are out there sampling as well.

MS. ALLEN: Thank you very much. Now, we are going to go to the closing comments by our speakers – oh, we had one more question? I think that was our second question. Sorry, we are going to go, now, to closing comments.

And we also urge the reporters to go to www.deepwaterhorizonresponse.com, where you're going to be seeing, on a regular – well, it should be up there this afternoon, if not now – information about injured and dead fish and wildlife and numbers on sea turtles, dolphins, birds and any other animals that are impacted by the oil spill.

And those numbers will be regularly updated at the Deepwater Horizon website. So now, we will begin with the closing comments by Dr. Steve Murawsky of NOAA fisheries, the director of scientific programs and the chief science advisor.

MR. MURAWSKY: Thank you, Monica. And I just want to reiterate how seriously we all, in the federal family, are taking this particular spill. It is, as was mentioned before, unprecedented. We've never had this substantial an oil leak at a mile down, and trying to understand the magnitude of these impacts is a difficult proposition.

But what I do want to say is that my colleagues, you know, throughout the agencies, and state people that are working on this, all feel that it's important for us to cast this in as broad a net as we can to try to understand the totality of the impacts. And we will be working diligently to do that. Thank you.

OPERATOR: Now, we will hear closing comments from Dr. Glen Plum, the chief of natural resources at Yellowstone National Park.

MR. PLUM: Yeah, in closing, I'd like to reiterate that the National Park Service is dedicated to working fully in support of this incident. We are deploying our staff from around the country – the park staff in the units in the Gulf are working tirelessly on this issue. We have people on the ground responding to reports of sick or injured wildlife. We are providing direct and support assistance in getting those animals to rehab centers and releasing them out of harm's way.

We are marshaling our ability to conduct an array of monitoring and scientific research with our partners to investigate the short and the long-term effects of this event. And we are

working tirelessly with our federal partners, our tribal partners and our state partners and our non-government partners to live up to our responsibilities.

OPERATOR: Thank you. And now, we will hear from, closing comments, Dr. Rowan Gould, the acting director of the U.S. Fish and Wildlife Service. And that will end our conference today.

MR. GOULD: So I'd just like to thank everybody for participating. And I would like to – my comments are over – you can put the word "and," and the first two colleagues that reiterated what we're doing out there kind of hit it – summarized it all. But and, I just want to make sure you know that we're doing everything we can do to prepare for the oil's immediate impacts. And then we're also preparing for the likelihood that it will persist in the Gulf ecosystem for years to come.

This spill is unprecedented. At the highest levels, people are doing what they can do to assist out there. Tom Strickland, our assistant secretary for the interior for fish, wildlife and parks is overseeing our federal wildlife response. And overall, the Department of the Interior has deployed, as I said before, over 600 employees out here to do what we can do with our partners, with BP and other federal agencies and state partners to respond to the oil spill, as it relates to the impacts on wildlife.

And we all know this spill, in all likelihood, will affect fish and wildlife resources in the Gulf and across North America, potentially for years, potentially maybe decades. We may never know the extent of the spill's impacts on many species of birds and marine mammals, given how far offshore they spend most of their lives and in the vast area of the Gulf in which they are found. All I can say, though, is still, we are responding to this unprecedented threat as quickly and comprehensively as possible. And again, thank you very much for participating in this call.

(END)